

### 2x3mm RECTANGULAR SOLID LAMPS

L-914Hx BRIGHT RED
L-914Gx GREEN
L-914Ix HIGH EFFICIENCY RED
L-914Ex ORANGE
L-914PGT PURE GREEN
L-914Ax YELLOW

### **Features**

- •LOW POWER CONSUMPTION.
- •ULTRA BRIGHTNESS IS AVAILABLE.
- •RELIABLE AND RUGGED.
- •EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- •SUITABLE FOR LEVEL INDICATOR.

### **Description**

The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

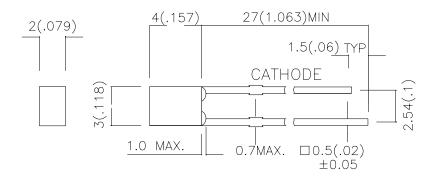
The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Pure Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

## **Package Dimensions**



#### Notes

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01")$  unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

SPEC NO: KDA0282 APPROVED: J.LU REV NO: V.1 CHECKED: DATE: SEP/15/2001 DRAWN: J.X.FU PAGE: 1 OF 6



## **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 10 mA		<b>Viewing</b> Angle
			Min.	Тур.	201/2
L-914HD	BRIGHT RED (GaP)	RED DIFFUSED	0.2	1	100°
L-914HT	BRIGHT RED (GaP)	RED TRANSPARENT	0.5	1	90°
L-914ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	2	8	100°
L-914IT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED TRANSPARENT	3	8	90°
L-914ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	2	8	100°
L-914ET	HIGH EFFICIENCY RED (GaAsP/GaP)	ORANGE TRANSPARENT	3	8	90°
L-914GD	GREEN (GaP)	GREEN DIFFUSED	2	6	100°
L-914GT	GREEN GaP)	GREEN TRANSPARENT	3	8	90°
L-914AD	YELLOW(GaAsP/GaP)	AMBER DIFFUSED	2	5	100°
L-914AT	YELLOW (GaAsP/GaP)	AMBER TRANSPARENT	2	7	90°
L-914PGT	PURE GREEN (GaP)	GREEN TRANSPARENT	0.5	1	90°

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Green	700 627 627 565 590 555		nm	IF=20mA
λD	Dominate Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Green	660 625 625 568 588 555		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Bright Red High Efficiency Red Orange Green Yellow Pure Green	45 45 45 30 35 30		nm	IF=20mA
С	Capacitance	Bright Red High Efficiency Red Orange Green Yellow Pure Green	40 15 15 15 20 45		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Bright Red High Efficiency Red Orange Green Yellow Pure Green	2.25 2.0 2.0 2.2 2.1 2.25	2.5 2.5 2.5 2.5 2.5 2.5 2.5	V	IF=20mA
l <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

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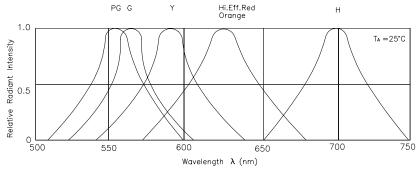
Note: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

Parameter	<b>Bright</b> Red	<b>High</b> Efficiency Red	Orange	Green	Yellow	<b>Pure</b> Green	Units	
Power dissipation	120	105	105	105	105	105	mW	
DC Forward Current	25	30	30	25	30	25	mA	
Peak Forward Current [1]	120	160	160	140	140	135	mA	
Reverse Voltage	5	5	5	5	5	5	V	
Operating/Storage Temperature	-40°C To +85°C							
Lead Solder Temperature [2]	260°C For 5 Seconds							

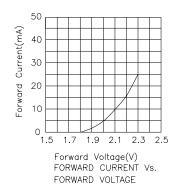
#### Notes

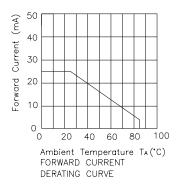
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

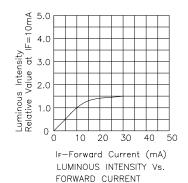


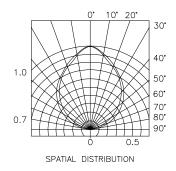
RELATIVE INTENSITY Vs. WAVELENGTH

## Bright Red L-914HD,L-914HT



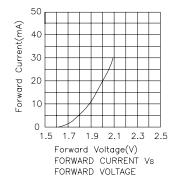


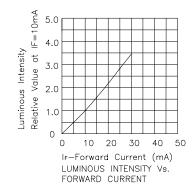


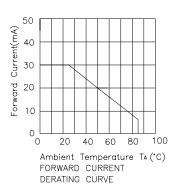


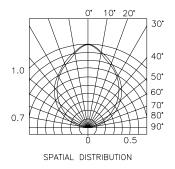
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## High Efficiency Red L-914ID,L-914IT

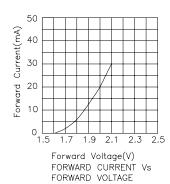


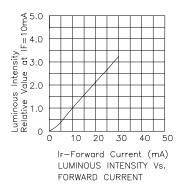


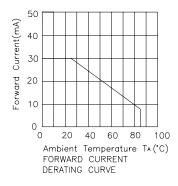


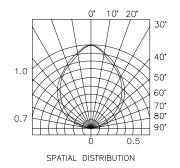


## Orange L-914ED,L-914ET





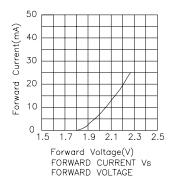


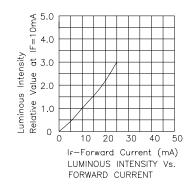


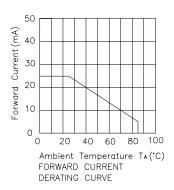
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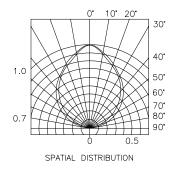
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## Green L-914GD, L-914GT

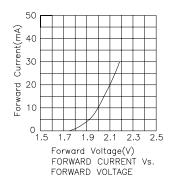


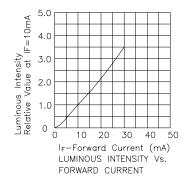


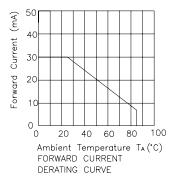


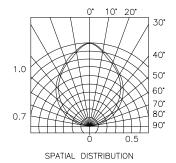


## Yellow L-914AD,L-914AT









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## Pure Green L-914PGT

